

# Technical Data Sheet

## InVivoMAb anti-rat CD86 (B7-2)



**Attention:** Use of this product constitutes an agreement to Bio X Cell's Terms and Conditions which are included with this product in print and can also be found at <https://bioxcell.com/terms-and-conditions>.

### Lot Specific Information

**Lot Number:** Lot Specific\*  
**Volume:** Lot Specific\*  
**Concentration:** Lot Specific\* (generally 4 to 11 mg/ml) \*  
**Total Protein:** Lot Specific\*

\*This information will be noted on the certificate of analysis that ships with this product.

### Product Information

**Catalog Number:** BE0442  
**Clone:** OX-48  
**Isotype:** Mouse IgG1,  $\kappa$   
**Recommended Isotype Control(s):** InVivoMAb mouse IgG1 isotype control, unknown specificity  
**Recommended Dilution Buffer:** InVivoPure pH 7.0 Dilution Buffer  
**Immunogen:** Activated rat T blasts  
**Reported Applications:** *in vitro* functional assays  
Immunoprecipitation  
Flow cytometry  
Immunohistochemistry (frozen)  
**Formulation:** PBS, pH 7.0  
Contains no stabilizers or preservatives  
**Endotoxin:** <2EU/mg (<0.002EU/ $\mu$ g)  
Determined by LAL gel clotting assay  
**Purity:** >95%  
Determined by SDS-PAGE  
**Sterility:** 0.2  $\mu$ m filtered  
**Production:** Purified from cell culture supernatant in an animal-free facility  
**Purification:** Protein G  
**RRID:**  
**Molecular Weight:** 150 kDa

### Description

The OX-48 monoclonal antibody recognizes CD86, also referred to as OX-48 antigen or B7-2, which is a type I membrane protein from the immunoglobulin superfamily. CD86 is a costimulatory molecule that is distributed on subsets of T and B cells, dendritic cells (DCs), peritoneal macrophages, spleen macrophages, and polymorphs. CD86 is not expressed on resting lymphocytes. CD86 acts as a ligand for CD28 and CTLA-4. CD86 on DCs binds to CD28 on T cells, thereby providing T cells with costimulatory signals, significantly lowering the activation threshold and allowing naive T cells to be readily activated. Inversely, CD86 binding to CTLA-4 negatively regulates T cell activation and diminishes the immune response. CD86 is involved in the regulation of B cell function (IgG1 production) and the CD40-mediated activation of the NF- $\kappa$ B signaling pathway. Owing to its very low expression on CD4+CD25+ T cells, the targeting of CD86 with the OX-48 antibody is known for its ability to subdivide CD4+CD25+ T cells. *in vitro* experiments have shown that the addition of the OX-48 antibody to cell cultures leads to a blockade of CD86 binding with CD28, thereby inhibiting T cell proliferation.

### Storage

Store at the stock concentration at 4°C. **Do not freeze.**

It is not uncommon for a floccule or precipitate to appear during storage. The floccule is typically buffer salts precipitating out

of solution or a small bit of protein aggregation. For information on how to remove floccules or precipitates see our FAQ's at <https://bioxcell.com/faqs>.

## Protocol Information

Since applications vary, each investigator should use the application references as a guide to help estimate the appropriate dose or concentration. The dose or concentration can be further optimized experimentally in a dose response or titration experiment.

## Application References

For a complete list of references, visit [https://bioxcell.com/catalogsearch/result/?q=BE0442#tab\\_references](https://bioxcell.com/catalogsearch/result/?q=BE0442#tab_references) or scan the QR code below.



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*Not for resale.*

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